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10/005,030	12/03/2001	Yoram Tsarfati	205,413	9532

7590 09/23/2004

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EXAMINER

RAMPURIA, SATISH

ART UNIT PAPER NUMBER

2124

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/005,030

Applicant(s)

TSARFATI, YORAM

Examiner

Satish S. Rampuria

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03/19/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***DETAILED ACTION***

1. This action is in response to the application filed on 12/03/2001.
2. Claims 1-48 are pending.

***Information Disclosure Statement***

3. An initialed and dated copy of Applicant's IDS form 1449 filed on 03/06/2002 is attached to the instant Office action.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 7-8, 16-19, 23-25, 32-34, 39-40, and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by US Publication No. 2004/0015809 to Cheng (hereinafter called Cheng).

**Per claim 1, 16:**

Cheng disclose:

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- A method for producing embedded software ('809 page 1, paragraph 2 "generation of program code for integrating devices into a middleware framework"), comprising:
- providing one or more generic application handler programs ('809 page 1, paragraph 8 "providing a middleware code generation system that generates program code for integrating a device"), each such program comprising computer program code for performing generic application functions common to multiple types of hardware modules used in a communication system ('809 page 1, paragraph 21 "The interface device 110 is also used to control the code generation process and to modify the generated code");
- generating specific application handler code ('809 page 2, paragraph 27 "A module generator 254 generates code modules") to associate the generic application functions with specific functions of a device driver for at least one of the types of the hardware modules ('809 page 4, paragraph 41 "The information is used to generate methods (functions) related to the service in various modules"); and
- compiling the generic application handler programs together with the specific application handler code to produce machine-readable code to be executed by an embedded processor in the at least one of the types of the hardware modules ('809 page 1, paragraph 8 "the code generation system generates compilation facilities such as Makefiles" and ('809 page 1, paragraph 8 "program code for integrating a device into a network").

**Per claim 2:**

Cheng disclose:

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- wherein providing the generic application handler programs comprises providing an application program interface (API) to enable a system management program in the communication system to invoke the generic application functions ('809 page 4, paragraph 41 "An API is defined by the middleware specification to export every service, and the specification database 120 records this API for code generation purposes").

**Per claim 3:**

Cheng disclose:

- wherein the one or more generic application handler programs comprise a plurality of generic application programs, and wherein providing the API comprises enabling one of the generic application programs to invoke the generic application functions of another of the generic application programs ('809 page 4, paragraph 49 "valid software element types that can invoke this API 332', and is used to generate code 180 that requires checking of the callers' identity").

**Per claim 7 and 8:**

Cheng disclose:

- wherein providing the generic application handler programs comprises providing a maintenance handler, including a testing function for detecting failures in the hardware modules (page 2, paragraph 22 "the code generation system 150 generates the integration code modules 180 and a sample test application 185 for the device").

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*Claims 17, 18, 19, 23-24, and 32* are the system claim corresponding to method claim 1, 2, 3, 7-8, and 16 respectively, and rejected under the same rationale set forth in connection with the rejection of claims 1, 2, 3, 7-8, and 16 respectively, above.

*Claims 33, 34, 25, 39-40, and 48* are the computer product claim corresponding to method claim 1, 2, 3, 7-8, and 16 respectively, and rejected under the same rationale set forth in connection with the rejection of claims 1, 2, 3, 7-8, and 16 respectively, above.

Substantially as claimed.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-6, 9-15, 20-22, 25-31, 36-38, and 41-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng in view of the publication, published by Sun.com on October 17, 2001 (hereinafter called Sun).

**Per claims 4 and 5:**

Cheng does not explicitly disclose providing the generic application handler programs comprises providing a performance monitoring handler, including a performance monitoring function for counting selected events relating to performance of the hardware modules.

However, Sun discloses in an analogous computer system providing the generic application handler programs comprises providing a performance monitoring handler, including a performance monitoring function for counting selected events relating to performance of the hardware modules (page 5, section Core Applications “the central tool for monitoring and controlling network and system resources... Viewer provides... events and traps... Log viewer... the content of log record”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of having an performance monitoring handler to log the events and contents as taught by Sun into the method of generating code for the middleware dives as taught by Cheng. The modification would be obvious because of one of ordinary skill in the art would be motivated to have performance monitoring handler to provide robust network management by decreasing management traffic over the network as taught by Sun (page 1, section TMN Benefits).

**Per claims 6 and 9:**

Cheng does not explicitly disclose wherein providing the generic application handler programs further comprises providing an alarm handler, and wherein providing the performance monitoring handler comprises providing a programmable performance threshold and an alarm invocation function, such that when a count of the selected events exceeds the threshold, the performance monitoring handler sends an alarm message to the alarm handler.

However, Sun discloses in an analogous computer system providing the generic application handler programs further comprises providing an alarm handler (page 5, section Core

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Applications “Alarm manager... simplifies the analysis of event/trap and error reports”), and wherein providing the performance monitoring handler (page 5, section Core Applications “the central tool for monitoring and controlling network and system resources”) comprises providing a programmable performance threshold and an alarm invocation function, such that when a count of the selected events exceeds the threshold, the performance monitoring handler sends an alarm message to the alarm handler (page 9, section Benefits “Alarm reporting... allows a managed object class to support the generic notifications for alarm reporting specified...”).

The feature of providing an alarm handler would be obvious for the reasons set forth in the rejection of claim 4.

**Per claim 10:**

Cheng does not explicitly disclose wherein providing the generic application handler programs comprises providing a configuration handler, for holding configuration and state information regarding components of the hardware modules.

However, Sun discloses in an analogous computer system providing the generic application handler programs comprises providing a configuration handler, for holding configuration and state information regarding components of the hardware modules (page 5, section Core Applications “Configure Application Tool... allows users to add, modify, or delete applications from the application launcher”).

The feature of providing a configuration handler would be obvious for the reasons set forth in the rejection of claim 4.

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**Per claims 11-15:**

Cheng does not explicitly disclose wherein providing the generic application handler programs comprises providing an alarm handler, including functions for receiving and responding to alarm messages generated by others of the application handler programs.

However, Sun discloses in an analogous computer system providing the generic application handler programs comprises providing an alarm handler (page 5, section Core Applications “Alarm manager... simplifies the analysis of event/trap and error reports”), including functions for receiving and responding to alarm messages generated by others of the application handler programs (page 9, section Benefits “Alarm reporting... allows a managed object class to support the generic notifications for alarm reporting specified...”).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the method of having an alarm handler for notification as taught by Sun into the method of generating code for the middleware dives as taught by Cheng. The modification would be obvious because of one of ordinary skill in the art would be motivated to have alarm handler to provide robust network management by simplifying the event/trap error reports over the network as taught by Sun (page 1, section TMN Benefits).

***Claims 20-22, and 25-31*** are the system claim corresponding to method claims 4-6, and 9-15 respectively, and rejected under the same rational set forth in connection with the rejection of claims 4-6, and 9-15 respectively, above.

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*Claims 36-38 and 41-47* are the computer product claim corresponding to method claims 4-6, and 9-15 respectively, and rejected under the same rationale set forth in connection with the rejection of claims 4-6, and 9-15 respectively, above.

***Conclusion***

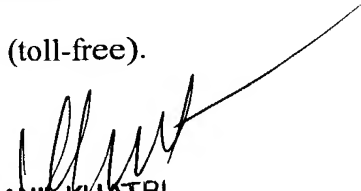
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Satish S. Rampuria** whose telephone number is **703-305-8891**. The examiner can normally be reached on **8:30 am to 5:00 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kakali Chaki** can be reached on **(703) 305-9662**. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satish S. Rampuria  
Patent Examiner  
Art Unit 2124  
09/20/2004

  
**ANIL KHATRI**  
**PRIMARY EXAMINER**